

CLAIMS

What is claimed is:

1. A method of preparing a cRNA sample substantially free of contaminants, comprising the following steps:
 - preparing a cRNA sample;
 - adding an organic solvent to said preparation of (a);
 - contacting an isolation column with the organic preparation of step (b), wherein said isolation column comprises a membrane; and
 - eluting said cRNA in a purified form from said column of step (c).
2. The method of claim 1, wherein said isolation column is a cRNA isolation column, wherein said membrane is selected from the group consisting of BTS, PVDF, nylon, nitrocellulose, polysulfone, MMM, PVP, and composites thereof.
3. The method of claim 2, wherein said membrane is a MMM membrane.
4. The method of claim 3, wherein said MMM membrane is an asymmetric membrane comprised of polysulfone and PVP polyvinylpyrrolidone.
5. The method of claim 3, wherein said MMM membrane has a pore size ranging from about 30 to about 40 μm on an upper side, and wherein said MMM membrane has a pore size ranging from about 0.4 μm to about 0.6 μm on a lower side.
6. The method of claim 5, wherein said membrane has a pore size of about 0.4 μm on said lower side.
7. The method of claim 1, wherein said cRNA is labeled.
8. The method of claim 7, wherein said label is either radioactive or fluorescent.

9. The method of claim 8, wherein said fluorescent label is a cyanine dye.
10. The method of claim 1, wherein said purified cRNA is from about 55% to about 65% pure.
11. The method of claim 1, wherein said purified cRNA is from about 65% to about 75% pure.
12. The method of claim 1, wherein said purified cRNA is from about 75% to about 85% pure.
13. The method of claim 1, wherein said purified cRNA is from about 85% to about 95% or greater pure.
14. The method of claim 1, wherein said organic solvent is ethanol.
15. The method of claim 1, wherein said isolation column is either a SiCw column or an RNA isolation column.
16. A kit for isolating cRNA in a form essentially free from contamination, comprising the following:
 - a cRNA isolation column, wherein said column comprises an asymmetric membrane;
 - reagents for (a); and
 - instructions for implementing the isolation of cRNA.
17. The kit of claim 16, wherein said cRNA isolation column membrane is selected from the group consisting of BTS, PVDF, nylon, nitrocellulose, polysulfone, MMM, PVP, and composites thereof.
18. The kit of claim 17, wherein said cRNA isolation column membrane is MMM.

19. The kit of claim 16, wherein said reagents include at least one organic solvent, nuclease free water, RLT buffer, and RPE buffer.